

CORE5 RESEARCH REPORT: A BLENDED LEARNING EARLY INTERVENTION FOR ELL AND NON-ELL KINDERGARTEN STUDENTS

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Sample Description

To demonstrate the efficacy of Lexia Core5 Reading (Core5) for early intervention, this study reports on two cohorts of kindergarten students within the same school. Students were assessed using the *Group Reading Assessment and Diagnostic Evaluation (GRADE)*. Cohort 1 represents a pilot study in which kindergarten students (ELL: 19; non-ELL: 62) used Core5 in the second half of the school year and were tested with the *GRADE* as a posttest at the beginning of the next school year. Cohort 2 consists of kindergarten students (ELL: 17; non-ELL: 67) who used Core5 for a full school year and were tested with the *GRADE* as a pretest at the beginning of the school year and as a posttest at the end of the school year. The majority of ELL students (>80%) were native speakers of Haitian-Creole.

Cohort 1 Pilot Results

During the pilot study, teachers participated in three trainings to support the integration of Core5 into the English Language Arts curriculum. School administrators received additional leadership training. Nominal rewards were provided to teachers with excellent classroom usage during the pilot study. Students in the pilot study averaged 77 minutes per week of online Core5 use.

Key Findings



- In the pilot study, ELL and non-ELL kindergarten students used Lexia® Core5® Reading during the second half of the school year. Through Core5's auto-placement tool, ELLs placed significantly behind non-ELL students in Core5. At the beginning of the following school year, ELLs scored in the average range on a standardized reading test and comparably to non-ELL students.
- Full-year use of Lexia Core5 Reading resulted in significant reading gains for both ELL and non-ELL kindergarten students, with ELL kindergarten students closing the reading gap with their non-ELL peers

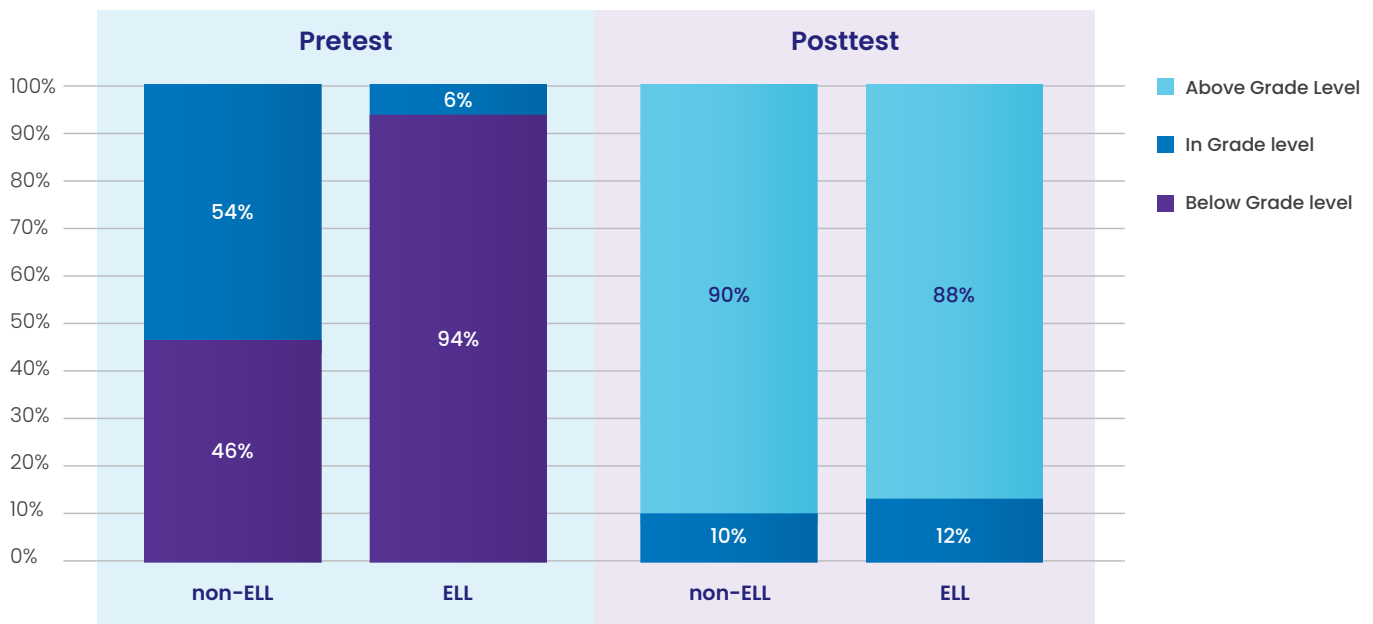
Kindergarten students in the pilot study started Core5 in late January and continued to the end of the school year. In January, ELL kindergarten students auto-placed¹ in Core5 at levels significantly below non-ELL kindergarten students.

Placement was below grade level for 68% of ELL kindergarten students compared to 35% of non-ELL kindergarten students. By the end of the school year, ELL kindergarten students were performing at similar Core5 levels as non-ELL kindergarten students: 98% and 100% in or above grade level, respectively. In addition, ELL kindergarten students began the next school year with mean *GRADE* standard scores in the average range and statistically equivalent to non-ELL kindergarten students (ELL: 98; non-ELL: 100). These results show advances in Core5 made by ELL kindergarten students in the second half of the school year were maintained through the summer and were evident at the beginning of the next school year.

Cohort 2 Results

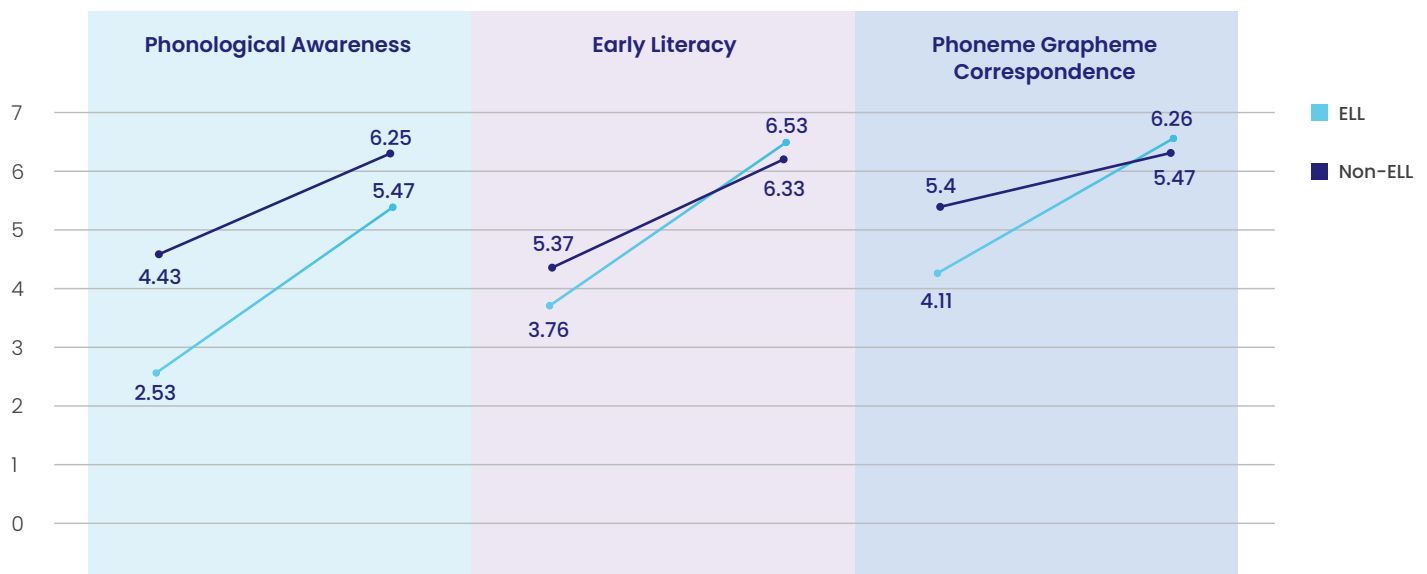
Cohort 2 consists of kindergarten students who used Core5 for a full school year from October to June. These students averaged 72 minutes per week of online Core5 use. In Cohort 2, ELL kindergarten students auto-placed significantly below non-ELL kindergarten students in Core5 (ELL: 94% below grade level; non-ELL: 46% below grade level). By the end of the school year, ELL and non-ELL kindergarten students showed nearly equivalent performance in Core5, with the vast majority of students in both groups working above grade level (ELL: 88%; non-ELL: 90%). See Figure 1.

Figure 1. Cohort 2 Pretest and Posttest Core5 Levels



In addition to advances in Core5, both ELL and non-ELL kindergarten students made significant gains on the GRADE. At the beginning of the school year, ELL kindergarten students scored significantly lower than non-ELL kindergarten students on the GRADE (ELL mean: 80; non-ELL mean: 93). By the end of the school year, ELL kindergarten students' mean score increased 20 standard score points to a posttest mean of 100, and non-ELL kindergarten students' mean score increased 15 standard score points to a posttest mean of 108. As shown in Figures 2-4, ELL kindergarten students made particular progress on the early literacy, phonological awareness, and phoneme-grapheme correspondence subtests from the GRADE,² closing the reading gap with their non-ELL peers.

Figure 1. Cohort 2 Pretest and Posttest Core5 Levels



Pre: $F(1,82) = 9.803, p < .01$	Pre: Welch's $F(1,41.834) = 35.414, p < .001$	Pre: $F(1,82) = 8.176, p < .01$
Post: $F(1,82) = .405$ NS	Post: $F(1,82) = 1.879$ NS	Post: Welch's $F(1,30.411) = 1.400$ NS

¹ Previous research has established that performance on the Core5 auto placement is significantly correlated with standard reading assessments, such as DIBELS, aimsweb, MAP, and STAR.

² Note: Overall GRADE scores are standard scores. Subtest scores on the GRADE are stanine scores.